

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS PO Box 1450 Alexandra, Virginia 22313-1450 www.repto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 10/531,371 | 08/17/2005 | Andreas Grundl | | 6509 |
| 26875 7590 122242008 WOOD, HERRON & EVANS, LLP 2700 CAREW TOWER | | | EXAMINER | |
| | | | RESTIFO, JEFFREY J | |
| 441 VINE STREET CINCINNATI, OH 45202 | | | ART UNIT | PAPER NUMBER |
| | , - | | 3618 | |
| | | | | |
| | | | MAIL DATE | DELIVERY MODE |
| | | | 12/24/2008 | PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Application No. Applicant(s) 10/531,371 GRUNDL ET AL. Office Action Summary Examiner Art Unit Jeffrey J. Restifo 3618 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS. WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). Status 1) Responsive to communication(s) filed on 22 September 2008. 2a) ☐ This action is FINAL. 2b) This action is non-final. 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4) Claim(s) 18-35 is/are pending in the application. 4a) Of the above claim(s) 20.22.23.32 and 33 is/are withdrawn from consideration. 5) Claim(s) _____ is/are allowed. 6) Claim(s) 18 and 21.24-31.34.35 is/are rejected. 7) Claim(s) 19 is/are objected to. 8) Claim(s) _____ are subject to restriction and/or election requirement. Application Papers 9) The specification is objected to by the Examiner. 10) ☐ The drawing(s) filed on 14 April 2005 is/are; a) ☐ accepted or b) ☐ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. Attachment(s)

1) Notice of References Cited (PTO-892)

Paper No(s)/Mail Date 4/24/08,4/14/05.

Notice of Draftsperson's Patent Drawing Review (PTO-948)
 Information Disclosure Statement(s) (PTO/SB/08)

Interview Summary (PTO-413)
 Paper No(s)/Mail Date. ______.

6) Other:

5) Notice of Informal Patent Application

Application/Control Number: 10/531,371 Page 2

Art Unit: 3618

DETAILED ACTION

Election/Restrictions

- Applicant's election of Species a and A in the reply filed on 9/22/08 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).
- Claims 20, 22, 23, 32, and 33 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species b and B, there being no allowable generic or linking claim. Election was made without traverse in the reply filed on 9/22/08.

Drawings

3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: "62". Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner,

Application/Control Number: 10/531,371 Page 3

Art Unit: 3618

the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abevance.

Claim Objections

- 4. Claims 18-35 are objected to because of the following informalities: Claims 18, 29, 33, and 34 recite the term "and/or" which leave the claims indefinite. For examining purposes, the examiner has assumed the word "or" to be in place of "and/or".
 Appropriate correction is required.
- 5. Claims 21 and 30 are objected to because of the following informalities: Claim 21 recites dependency upon claim 18, however the "hollow cylindrical portion" is introduced in line 2 of claim 19, therefore the examiner has assumed claim 21 to depend upon claim 19. Claim 30 recites dependency upon claim 18, however the "modules" are introduced in claim 29, therefore the examiner has assumed claim 30 to depend upon claim 29. Appropriate correction is required.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- Claim 34 is rejected under 35 U.S.C. 102(b) as being anticipated by Morisawa et al. (US 5,904,631 A).
- Morisawa et al. discloses a hybrid drive train comprising a combustion engine
 variable gear transmission 110, first and second motor/generators MG!, MG2, each

Art Unit: 3618

with stator 143, 133 and rotor 142, 132, permanent connection or trans inputs 122, 128, energy source or battery (not shown), power control 150, common housing 101 which also acts as a common carrier for both stators, as shown in figures 1-3.

Claim Rejections - 35 USC § 103

 The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be neadtived by the manner in which the invention was made.

 Claim 35 is rejected under 35 U.S.C. 103(a) as being unpatentable over Morisawa et al., as applied to claim 34 above, and further in view of Fliege (US 5,678,646 A).

Morisawa et al. does not disclose a cooling means for the stators on the carrier. Fliege does disclose a carrier 7, 9 for stator 23 and cooling means 47, as shown in figures 1-3. It would have been obvious to one having ordinary skill in the art at the time of the invention to have provided the motor drivetrain of Morisawa et al. with the stator cooling means of Fliege in order to prevent overheating of the motor.

 Claims 18, 20, and 24-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Morisawa et al. (US 5,904,631 A) and in further view of Fliege (US 5,678,646 A).

With respect to claim 18, all the limitation recited in this claim have been addressed in the rejection of claims 34 and 35 above.

With respect to claim 20, the housing or carrier of Morisawa et al. is circular.

With respect to claim 27, Morisawa et al. discloses the motors as being different power consumptions and sizes, as recited in col. 4, lines 35-65.

With respect to claims 24-26 and 28, parallel hybrid vehicles using clutches, hydraulic pump for transmission, auxiliary unit, and auto transmission are all conventional in the art and It would have been obvious to one having ordinary skill in the art at the time of the invention to have provided the hybrid vehicle of Morisawa et al. as modified by Fliege, with the parallel clutch arrangement, auto transmission, hydraulic pump, and auxiliary units, as is well-known in the art for providing control of the engine and motors in a fuel efficient manner.

With respect to claims 29-30, Fliege does disclose control modules 43 as being located radially around the housing or carrier able to be cooled by the cooling means, as shown in figure 1.

With respect to claim 31, Fliege discloses cooling channels crossings 59, as shown in figure 1.

Allowable Subject Matter

- 12. Claim 19 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
- 13. As allowable subject matter has been indicated, applicant's reply must either comply with all formal requirements or specifically traverse each requirement not complied with. See 37 CFR 1.111(b) and MPEP § 707.07(a).

Conclusion

Application/Control Number: 10/531,371

Art Unit: 3618

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey J. Restifo whose telephone number is (571) 272-6697. The examiner can normally be reached on M-F 10-7.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Ellis can be reached on (571) 272-6914. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Jeffrey J Restifo Primary Examiner Art Unit 3618

/Jeffrey J Restifo/ Primary Examiner, Art Unit 3618